The specification has been amended to include sequence identifiers. For the Examiner's ease of reference, submitted herewith is a clean version of Table 3. Should the Examiner request a substitute copy of the Table, same will be provided.

Newly presented claims 9 and 10 include sequence identifiers (new claim 9 differs from claim now cancelled claim 1 in that the new claim makes reference to all of the sequences in Tables 3 and 4). New claims 11 and 12 find support throughout the application, including at page 6, lines 17-25, and in the Detailed Description beginning at page 7.

In response to the Examiner's requirement for restriction, Applicants elect the subject matter of Group I (claim 1 – now claims 9 and 10). As regards the Examiner's requirement for election of a single sequence, Applicants elect the sequence of SEQ ID NO:39 (the 4th to the last sequence shown in Table 3).

The elections are made with traverse and the Examiner is respectfully requested to reconsider the requirements and to at least withdraw the requirement for election of a single sequence. The Examiner is further requested to include new claims 11 and 12 in elected Group I.

New claim 9 (like prior claim 1) is drawn to a vaccine comprising a mixture or linear array of peptides. As is clear from the specification, vaccines of the invention can be designed based on analysis of the HLA alleles present in a chort to be immunized and analysis of the most common HIV variants present in the geographic location of the cohort. That being the case, it will be clear that to require limitation to a single sequence would preclude Applicants from obtaining consideration on the merits of a

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claim reciting a particular combination of peptides that could be used to effectively protect a specific cohort. Such a situation unfairly disadvantages Applicants, given the nature of their invention.

The only basis given by the Examiner for the requirement for election of a single sequence is that each sequence represents an independent and distinct invention and that examination of more than one sequence would result in an undue burden on the PTO. The Examiner makes reference to the Commissioner's Notice of November 19, 1996, suggesting that it allows for restriction to a single sequence. While such may be the case, the Examiner's requirement for restriction between each of the sequences fails to comply with at least the spirit of the Commissioner's Notice. The Commissioner indicated in that Notice that the Patent Office was attempting to strike a balance between aiding the biotechnology industry in protecting its intellectual property without creating an undue burden on the Office. Clearly, at a cost of approximately $740 per application in filing fees alone, the burden placed on Applicants to pursue each of the allegedly separately patentable and distinct sequences is grossly unfair.

Again, reconsideration is requested.

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Respectfully submitted,

NIXON & VANDERHYE P.C.

By: Mary J. Wilson

Mary J. Wilson
Reg. No. **32,955**

MJW:tat
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

TABLE 3

Th-CTL Peptide Prototype Vaccine Immunogens for Testing in Either Mice, Rhesus Macaque or Human

Vaccine number	Name of Peptides	Species tin which o be studied	Amino acid sequence	Restricting elements for CTL epitope
1.	Mouse HIV-1 Th-CTL epitopes		Th - CTL	
	A-Th/A-CTL	Mouse	HAGPIAPGQMREPRG-KQITNMWQEVGKAMYA	H-2^{kd}
	B-Th/B-CTL	Mouse	KRKVYLAWVPAHKGIG-MYAPPIGGQI	H-2 K^{d}
	C-Th/C-CTL	Mouse	QLLFIHFRIGCRHSR-DRVIEVVQGAYRAIR	H-2^{domain}(D^{d})
	D-Th/D-CTL	Mouse	EQMHEDIISLWDQSL-KPAIGPGRAFYTTKN	H-2 D^{d}
3.	Macaque SIV/HIV-1 Th-CTL epitopes		Th - CTL	
	Th1/CTL/SIV Gag	Macaque	SLYKYKVVKIEPLGVAPTKA-CTPYDINQM	Mamu-A*01
	Th2/CTL/SIV Pol	Macaque	VSTVQCTHGIRPVVSTQLLL-STPPLVRL	Mamu-A*01
	Th3/CTL/HIV-1 Env	Macaque	STSIRGKVQKEYAFFYKLDI-YAPPISGQI	Mamu-A*01
5.	Macaque SIV/HIV-1 Th-CTL p11c epitopes variants		Th - CTL	
	Th1/CTL/SIV Gag	Macaque	SLYKYKVVKIEPLGVAPTKA-CTPYDINQM	Mamu-A*01
	Th2/CTL/ SIV Gag/p11c/I-Y	Macaque	VSTVQCTHGIRPVVSTQLLL-CTPYDYNQML	Mamu-A*01
	Th3/CTL/ SIV Gag/p11c/I-A	Macaque	STSIRGKVQKEYAFFYKLDI-CTPYDANQML	Mamu-A*01
	Th4/CTL/ SIV Gag/p11c/I-D	Macaque	EYAFFYKLDIIPIDNDTTSY-CTPYDDNQML	Mamu-A*01
	Th5/CTL/ SIV Gag/p11c/I-K	Macaque	REQFGNNKTIIFKQSSGGDPE-CTPYDKNQML	Mamu-A*01
6.	Human HIV-1 Th-CTL overlapping epitopes		Th - CTL	
	A-Th/A-CTL	Human	KQIINMWQEVGKAMYA-KAPSPEVIPMF	HLA-B57,B58
	B-Th/B-CTL	Human	YRENILGLNKIVRMYS-MFPIPVGEIYKRWI-ILGLNKIVRMYSPTSI	HLA B35,B8,B27,A33,Bw62,B52
	C-Th/C-CTL	Human	DRVIEVVQGAYRAIR-VGPPVPRPQVPLRPMTYK	HLA A1,B7,B8,B35,A11,A2,A3,A31
	D-Th/D-CTL	Human	ASLWNWFNITNWLWY-WVYHTQGFFPDWQNYTP	HLA B7,B57,A1,B8,B18,B35
8.	Human HIV-1 Th-dominant/ subdominant CTL epitopes		Th - CTL	
	A-Th/E-CTL	Human	KQIINMWQEVGKAMYA-SLYNTVATL	HLA A2
	B-Th/F-CTL	Human	YRRWIILGLNKIVRMYS-KIRLRPGGK	HLA A3
	C-Th/G-CTL	Human	DRVIEVVQGAYRAIR-KRNIILGLNK	HLA B27
	D-Th/H-CTL	Human	ASLWNWFNITNWLWY-GGKKKYKL	HLA B8
	E-Th/I-CTL		MREPRGSKIAGTTST-ERYLKDQQL	HLA B14
10.	Human HIV-1 Th-CTL p17 epitope (A2 Variants)		Th - CTL	
	B-Th/E-CTL	Human	YRRWIILGLNKIVRMYS-SLYNTVATL	HLA A2
	C-Th/J-CTL	Human	DRVIEVVQGAYRAIR-SLFNTVATL	HLA A2
	A-Th/K-CTL	Human	QIINMWQEVGKAMYA-SLYNAVATL	HLA A2
	D-Th/L-CTL	Human	ASLWNWFNITNWLWY-SLYNTVAVL	HLA A2
	E-Th/M-CTL	Human	MREPRGSKIAGTTST-SLFNLLAVL	HLA A2

Vaccine number	Name of Peptides	Amino acid sequence	Restricting elements for CTL epitope
11.	Human HIV-1 Th-CTL overlapping epitopes	Th - CTL	
	A*-Th/J-CTL	KQIINMWQVVGKAMYA-GQMVHQAISPRTLNAWVKVV	A2, A202,A5, B7, B14, B57, B5701, B5801, B02, Cw3
	A*-Th/K-CTL	KQIINMWQVVGKAMYA-ATPQDLNTMLNTVGGHQAAMQMLKETINEEAAEW	A2,A25, A36, B7, B12, B14, B1402, B27, B39, B52, B53, B57, B58, B8101, Cw8, Cw0102
	A*-Th/L-CTL	KQIINMWQVVGKAMYA-GPKEPFRDYVDRFYKTLRAEQASQEVKNWMT	A3,A202,A5,A24,A2402,A25,A26, A33, B7, B8,B12, B14 B35,B39, B44, B52, B53Bw62, B27, B2705, B57, B5701, B70, B71,Bw62, Cw3, Cw8, Cw0401
	A*-Th/M-CTL	KQIINMWQVVGKAMYA-KIRLRPGGKKYKLKHIVWGSRELRSLYNTVATLYCVHQRI	A1,A2,A3, A3.1,A03, A11, A23, A24, A0201, A2402, B8, B27, B42, B62, Bw62, Cw4

A*-Th/C4E9V